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APPLICATION NO.	1	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,546		07/30/2003	Shigeru Furumiya	2003_1064	6505
513	7590	03/27/2006		EXAMINER	
	-	ND & PONACK, L	CHU, KIM KWOK		
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WASHINGTON, DC 20006-1021				2627	,
				DATE MAILED: 03/27/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Analicant/a)					
	Application No.	Applicant(s)					
	10/629,546	FURUMIYA ET AL.					
Office Action Summary	Examiner	Art Unit					
	Kim-Kwok CHU	2653					
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address					
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I.  lely filed  the mailing date of this communication.  O (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on Pre-A	mendment filed on 6/18/2004						
·= · · · · · ·							
<i>,</i>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	•						
Disposition of Claims							
4) ☐ Claim(s) <u>5 and 10-12</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) 5 and 10-12 is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
9) The specification is objected to by the Examiner	•,						
10) The drawing(s) filed on $\frac{7/30/2003}{2003}$ is/are: a) a		he Examiner.					
Applicant may not request that any objection to the o	drawing(s) be held in abeyance. See	37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correcti	on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f).					
a) ☑ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents	have been received						
<ul> <li>1. ☐ Certified copies of the priority documents have been received.</li> <li>2. ☒ Certified copies of the priority documents have been received in Application No. 09/582,675.</li> </ul>							
3. Copies of the certified copies of the priority	• •						
application from the International Bureau	•	a in the Mational Stage					
* See the attached detailed Office action for a list of	, ,,	d.					
Attachment(s)	_						
1) X Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da						
Paper No(s)/Mail Date		atent Application (PTO-152)					

## Claim Rejections - 35 USC § 112

1. the following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2. Claims 5, 10, 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- (a) in claim 5, line 2, the term "standard recording pulse" is indefinite because Applicant does not define what is a standard pulse; and
- (b) similarly, in claims 10, line 2, the term "standard recording pulse" is indefinite because Applicant does not define what is a standard pulse.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 5 and 10 are rejected under 35 U.S.C. § 102(b) as being anticipated by Spruit et al. (U.S. Patent 5,617,399).

Spruit teaches a recording apparatus having all of the steps as recited in claim 5. For example, Spruit teaches the following:

- (a) as in claim 5, obtaining a recording pulse parameter by reading standard recording pulse parameters (test information pattern) from a writable optical disc to which are prerecorded (selectable pattern in a buffer sector) standard recording pulse parameters defining recording pulse position information for each of plural possible mark length and space length combinations (Fig. 5; column 1, lines 42-49; test pattern is selectable; column 2, lines 40 and 41);
- (b) as in claim 5, correcting a standard recording pulse parameter and obtaining a best recording pulse parameter (Fig. 5; abstract);

- (c) as in claim 5, performing a first test write to the optical disc using position information for any one combination selected from all mark length and space length combinations in the standard recording pulse parameters (Fig. 5; step S1; test pattern can be random or selectable; column 2, lines 40 and 41);
- (d) as in claim 5, reproducing the first test write and detecting a first jitter from the reproduced signal (Fig. 5; step S4);
- (e) as in claim 5, adding a first specific amount of change (light intensity) to the position information for the above one combination selected from all mark length and space length combinations in the standard recording pulse parameters (Fig. 5; light intensity is set according to the read result);
- (f) as in claim 5, performing a second test write to the optical disc using the changed position information (Fig. 5; steps S6 and S11 are loop back to step S3);
- (g) as in claim 5, reproducing the second test write and detecting a second jitter from the reproduced signal (Fig. 5; test write and read are repeated); and
- (h) as in claim 5, comparing the first jitter (error) and second jitter, and selecting the position information used for the test write with less jitter (Fig. 5; steps S5 and S14);

Page 5

10/629,546 AU 2653

- (i) as in claim 5, when there is first position information selected for the one combination selected from all mark length and space length combinations, and second position information selected for a separate combination selected from all mark length and space length combinations, position information between the two combinations is obtained by interpolation from the first position information and the second position information (Fig. 5; column 2, lines 11-18).
- 5. Apparatus claim 10 is drawn to the apparatus corresponding to the method of using same as claimed in claim 5. Therefore apparatus claim 10 corresponds to method claim 5, and is rejected for the same reasons of anticipation as used above.

6. Claims 11 and 12 are rejected under 35 U.S.C. § 102(b) as being anticipated by Spruit et al. (U.S. Patent 5,617,399).

Spruit teaches a recording apparatus having all of the steps as recited in claim 11. For example, Spruit teaches the following:

- (a) as in claim 11, determining a recording pulse parameter (light intensity) for an optical disc having prerecorded (selectable pattern in a buffer sector) recording pulse parameters (test information pattern) defining recording pulse position information for each of a plurality of mark length and space length combinations (Fig. 5; column 1, lines 42-49; test pattern is selectable; column 2, lines 40 and 41);
- (b) as in claim 11, performing a first test write to the optical disk using the prerecorded recording pulse parameter for a first mark length and space length combination (Fig. 5; step S1; test pattern can be random or selectable; column 2, lines 40 and 41);
- (c) as in claim 11, reproducing the first test write and detecting a first jitter from the reproduced first test write (Fig. 5; step S4);
- (d) as in claim 11, adding a first correction value to the prerecorded recording pulse parameter to form a second recording pulse parameter and performing a second test write to

the optical disc using the second recording pulse parameter (Fig. 5; light intensity is set according to the read result);

- (e) as in claim 11, reproducing the second test write and detecting a second jitter from the reproduced second test write (Fig. 5; step S6 and S11 are loop back to step S3);
- (f) as in claim 11, comparing the first jitter with the second jitter (Fig. 5; steps S5 and S14);
- (g) as in claim 11, selecting either the prerecorded recording pulse parameter or the second recording pulse parameter for the first mark length and space length combination based on the comparison of the first jitter with the second jitter (Fig. 5; the first test pattern is uses to determine the recording pulse parameter and there is no repeat test write); and
- (h) as in claim 11, when a recording pulse parameter is selected for the first mark length and space length combination and a recording pulse parameter is selected for a second mark length and space length combination, a recording pulse parameter is calculated for a third mark length and space length combination by interpolation between the recording pulse parameters for the first and second mark length and space length combinations (Fig. 5; column 2, lines 11-18; the third mark length and space length combination is the result of a new light intensity setting by the interpolation process).

7. Apparatus claim 12 is drawn to the apparatus corresponding to the method of using same as claimed in claim 11. Therefore apparatus claim 12 corresponds to method claim 11, and is rejected for the same reasons of anticipation as used above.

## Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kumita et al. (6,356,515) is pertinent because Kumita teaches a method of controlling the recording light power.

Fuji et al. (6,310846) is pertinent because Fuji teaches a method of controlling the recording condition.

Toda et al. (5,974,021) is pertinent because Toda an optimal recording power in an optical information apparatus.

9. Any response to this action should be mailed to:

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Or faxed to:

(571) 273-8300 (for formal communications intended for entry. Or:

(571) 273-7585, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Any inquiry of a general nature or relating to the status of this application should be directed USPTO Contact Center (703) 308-4357; Electronic Business Center (703) 305-3028.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kim-Kwok CHU

Examiner AU2653 / 66

March 20, 2006 (571) 272-7585

WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600